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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/726,192 | 12/02/2003 | Kwasi Addo Asare | RSW9-2003-0193US1 (7161-1) | 2577 |
| 46320 7590 03/26/2007 CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP STEVEN M. GREENBERG 950 PENINSULA CORPORATE CIRCLE SUITE 3020 BOCA RATON, FL 33487 | | | EXAMINER DAO, THUY CHAN | |
| | | | ART UNIT 2192 | PAPER NUMBER |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | | MAIL DATE | DELIVERY MODE |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/726,192

Applicant(s)

ASARE ET AL.

Examiner

Thuy Dao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is responsive to the amendment filed on January 19, 2007.
2. Claims 1-17 have been examined.

Response to Arguments

3. Claims 8-10 rejected under 35 USC § 101:

The Applicants stated, "*The claimed invention, however, is not claimed as descriptive material per se. Instead, the claimed invention is claimed as part of a functional device (i.e., a repository, a classification processor)*" (Remarks, page 2, lines 12-14).

Applicants' arguments are persuasive and the 35 USC § 101 rejection over claims 8-10 is withdrawn.

4. The Applicants are thanked for a thorough reply. Applicants' arguments have been considered but are moot in view of the new grounds of rejection.

Claim Rejections – 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 6-9, 11-14, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,978,401 to Avvari et al. (art made of record, hereinafter "Avvari").

Claim 1:

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Avvari discloses a storage and a *hosting environment abstraction method* (e.g., FIG. 2, col.7: 1-42) *comprising the steps of:*

enumerating each of a set of components in an application; identifying dependencies between each component in said set (e.g., FIG. 7B-C, col.9: 33-67);

organizing a generic representation of said set of components into a hierarchical structure based upon said identified dependencies (e.g., FIG. 8A-F, col.10: 1-26);

producing a model encapsulating said hierarchical structure; and storing said model in a repository for subsequent retrieval (e.g., col.2: 9-17, 39-52; col.3: 10-26; col.5: 12-29).

Claim 2:

The rejection of claim 1 is incorporated. Avvari also discloses *identifying dependencies between target platform resources and said components in said set; and, recording said further identified dependencies in said model* (e.g., col.2: 9-17; col.3: 10-26).

Claim 3:

The rejection of claim 1 is incorporated. Avvari also discloses *the step of inspecting each component in said set for data and method member references to other ones of said components in said set, said references indicating a dependency* (e.g., FIG. 7B-C, col.9: 33-67).

Claim 4:

The rejection of claim 2 is incorporated. Avvari also discloses *inspecting each component in said set for data and method member references to said target platform resources* (e.g., col.2: 39-52; col.5: 12-29).

Claim 6:

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The rejection of claim 1 is incorporated. Avvari also discloses *performing enumerating, identifying, organizing, producing and storing step subsequent to installing said application in a target platform* (e.g., col.2: 9-17; col.3: 10-26).

Claim 7:

The rejection of claim 1 is incorporated. Avvari also discloses *retrieving said model from said repository prior to installing a new component for use in said application* (e.g., col.2: 39-52; col.5: 12-29).

Claim 8:

Avvari discloses *a hosting environment abstraction system comprising:*

a hosting environment configured to support an application comprising a plurality of interdependent components and resources, which support at least one of said interdependent components (e.g., FIG. 2, col.7: 1-42; FIG. 3-4, col.7: 43 – col.8: 18);

a repository configured to store a dependency model of said application (e.g., col.2: 9-52; col.3: 10-26; col.5: 12-29); and

a classification processor coupled to said hosting environment and said repository (e.g., FIG. 7B-C, col.9: 33-67; FIG. 3-4, col.7: 43 – col.8: 18).

Claim 9:

The rejection of claim 1 is incorporated. Avvari also discloses *an operating system, an application server and a virtual machine* (e.g., FIG. 2-4, col.7: 1 – col.8: 18).

Claims 11-14 and 16-17:

Claims recite the same limitations as those of claims 1-4 and 6-7, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 11-14 and 16-17.

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7. Claims 1, 8, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,996,516 to Kimura et al. (art made of record, hereinafter "Kimura").

Claim 1:

Kimura discloses a storage and a *hosting environment abstraction method* (e.g., FIG. 1, col.3: 35-46) *comprising the steps of:*

enumerating each of a set of components in an application; identifying dependencies between each component in said set (e.g., FIG. 2, Data Flow Information, Call Graph, Flow Graph, Program Dependence Graph, col.4: 6-62);

organizing a generic representation of said set of components into a hierarchical structure based upon said identified dependencies (e.g., FIG. 3, col.7: 27 – col.8: 65);

producing a model encapsulating said hierarchical structure; and storing said model in a repository for subsequent retrieval (e.g., FIG. 4, blocks S2-S8, col.9: 8-48).

Claim 8:

Avvari discloses a *hosting environment abstraction system comprising:*

a hosting environment configured to support an application comprising a plurality of interdependent components and resources, which support at least one of said interdependent components (e.g., FIG. 1, col.3: 35-46; FIG. 2, col.4: 6-62);

a repository configured to store a dependency model of said application (e.g., FIG. 3, col.7: 27 – col.8: 65); and

a classification processor coupled to said hosting environment and said repository (e.g., FIG. 4, col.9: 8-48).

Claim 11:

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Claim 11 recites the same limitations as those of claim 1, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 11.

Claim Rejections – 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avvari in view of US Patent No. 6,339,776 to Dayani-Fard et al. (art made of record, hereinafter "Dayani-Fard").

Claim 5:

The rejection of claim 1 is incorporated. Avvari does not explicitly disclose *writing said hierarchical structure to a markup language document wherein tags in said markup language document demarcate individual ones of said components and said identified dependencies.*

However, in an analogous art, Dayani-Fard further discloses *writing said hierarchical structure to a markup language document wherein tags in said markup language document demarcate individual ones of said components and said identified dependencies* (e.g. col.4: 41-59; col.6: 57 – col.7: 34).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Dayani-Fard into that of Avvari. One would have been motivated to do so to provide the capability to integrate heterogeneous information sources, to integrate external visualization

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and analytical tools, to integrate search and browsing utilities, and to support highly-evolving data management as suggested by Dayani-Fard (e.g., col.4: 18-28, 52-59).

Claim 10:

The rejection of claim 8 is incorporated. Avvari also discloses *said dependency model comprises an XML formatted document* (e.g., col.4: 41-59; col.6: 57 – col.7: 34).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Dayani-Fard into that of Avvari. One would have been motivated to do so as set forth above.

Claim 15:

Claim 15 recites the same limitations as those of claim 5, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 15

Conclusion

10. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.


The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM
SUPERVISORY PATENT EXAMINER